

REMARKS/ARGUMENTS

35 U.S.C. §112, second paragraph

Claims 17 and 18 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Claims 17 and 18 are amended above to overcome the basis for the rejection. No new matter has been added. Entry of the amendments is requested.

35 U.S.C. § 103(a)

Claims 1-3 and 15-16 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ohsawa (U.S. 2001/0032691) and optionally Heinen '100 (GB 2,363,100) or Heinen '835 (U.S. 6,415,835).

The subject invention as claimed comprises a tire having projections extending from an outer surface. Applicants have not and are not claiming the broad concept of projections that project from an outer tire surface. Rather, claim 1 specifies that the projections are defined by first sides and second sides of unequal length, the first sides being longer and defining with the second sides an angle from 5 to 60 degrees and forming an apex that protrudes by a height from .2 to 100 micrometers and any plane tangent to the first side of the projection cutting the radially outer surface at an acute angle.

The consequence of the invention is a projection having an undercut extending from the projection apex to its base, a configuration that enhances the dirt and fluid discharging capabilities of the projection(s).

The cited collective art simply fails to teach or suggest a projection falling within the parameters of the claimed invention. As shown in the attached FIG. 26, Ohsawa discloses an angle alpha between a long side A of a projection and a short side B that is substantially ninety degrees. The Examiner has acknowledged that Ohsawa does not recite, therefore, a projection falling within the parameters of the claimed invention. Applicants do not dispute that Ohsawa shows asymmetrical projections but, rather than rendering the invention obvious, the fact that the asymmetrical projections of Ohsawa lie outside the claimed parameters of the invention is strong evidence of non-obviousness. The enhanced water and dispersement achieved by the present invention is not achieved by Ohsawa and there is no teaching or

suggestion in the reference as to the modification proposed by the Examiner.

Likewise, Heinen does in FIG. 4 (see attached copy of Heinen FIG. 4) teach an asymmetrical projection but, like Ohsawa, the Heinen angle alpha between longer side A and shorter side B does not lie within the claimed parameters. Heinen, in short, is cumulative to Ohsawa and both references, whether considered singularly, or in combination, fail to teach or suggest a projection having an angle of inclination falling within the claimed invention specifications.

As to claim 16, a mold for creating a tire having projections in which the angle between projection surfaces range from five to sixty degrees is not present in any teachings of Ohsawa. Severely sloping projections having a height that is within a 1 to 100 micrometer range is not taught by the reference. The conclusion that it would be obvious to modify the reference in order to achieve the invention is, accordingly, pure hindsight and is an improper basis for rejection of the pending claims.

As to claim 2 and 8, Applicants reiterate that Ohsawa has a pitch less than two times the depth but does not have an undercut shorter second side in each projection such that the angle between the longer and shorter sides of each projection falls within the prescribed range. As to claims 3, 7 the curved line of the present invention curves backward as an undercut pursuant to the claimed angle between the longer and shorter projection sides (claim 1). A curved line having such a structure at a projection apex is not present in Ohsawa. Claim 4 is considered patentable over the cited reference for the reason set forth above in regard to claim 1. Claim 5 specifies an angle beta from -15 to +15 degrees between the longitudinal axis of adjacent projections. No such range may reasonably be inferred from Ohsawa merely from a longitudinal orientation of the projections. Likewise the projection spacing found in claim 6 in the context of a projection having an undercut shorter surface to longer surface angle (claim 1) is not found in Ohsawa. Claims 7-14 are deemed patentably distinct as well for the reasons set forth above regarding the independent claim.

Claim 15 recites the utilization of projections having the claimed parameters and slope for the purpose of the creation of lettering. Thus, the function of facilitating liquid and dirt removal is integrated into the function of using projections to create lettering. Nowhere in Ohsawa is there such a teaching. Applicants dispute the Examiner's contention that FIG. 1 of Ohsawa shows the utilization of projections for the purpose of creating lettering.

Claims 1-8, 10-16 and 18 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Kemp (U.S. 6,253,815) and optionally Ohsawa (U.S. 2001/0032691).

Applicants traverse the basis for such a rejection set forth in the Office Action. The Kemp reference, as the Examiner notes, does not teach projections lying within the prescribed and claimed range of inclinations. Indeed, Kemp teaches, as the Examiner notes, a projection having substantially a ninety degree angle between projection sides. Moreover, the Kemp projections have a height falling outside of the height of the projections claimed in the application. Given that Kemp directly teaches contrary to and away from the claimed invention, it is incongruous to hold that a modification of Kemp toward the claimed invention would be obvious. Nothing in Kemp or Ohsawa provides instruction to their combination and modification. The invention teaches a low projection height (not found in Kemp) that gives a surface a fine texture while the projection of the invention is specifically recited to fall within a range of inclinations that will effectively eliminate fluid and dirt from the surface. Such a capability is not found in either Kemp or Ohsawa. For the aforesaid reasons, dependent claims 2-8, 10-16, and 18 are considered patentably distinct as well.

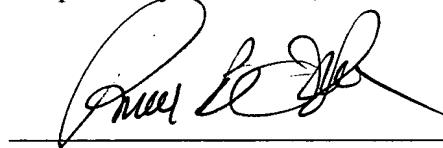
Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kemp (U.S. 6,253,815) and optionally Ohsawa (U.S. 2001/0032691) as applied above and further in view of Attinello et al (U.S. 5,645,660). As discussed previously, neither Kemp, Ohsawa, nor Attinello teach low profiled projections having an angle of inclination within a prescribed range in order to form an undercut in a leading side of the projection, and further utilizing a differentiation in the height of such projections in order to create visual distinction. Applicants are not contending, and claim 9 does not claim, the general concept of using differing projection heights in order to visibly differentiate a surface. Rather, the specific projection configuration set forth in claim 1 and incorporated into claim 9 recites the creation of a projection having improved liquid and dirt evacuation and differentiation in height in order to achieve a visible effect. No such combination of utilities or functions is achieved by the three cited references.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kemp (U.S. 6,253,815) and optionally Ohsawa (U.S. 2001/0032691) as applied above and further in view of Baker (U.S. 5,603,796). Applicants traverse the basis for this rejection. Claim 17 recites a process for adapting a surface through the use of a tape application to provide enhanced liquid and dirt evacuation as well as a visual differentiation. The tape carries projections of a configuration intended to provide such a combination of utilities that is neither found in Kemp, Ohsawa, nor Baker, whether considered singularly or in combination. The functional synergies achieved by configuring projections according to the claimed parameters would not

be achieved in a combination of Kemp, Ohsawa, and Baker even were such a combination suggested. Not only is there no such suggestion in the references cited, but the references individually fail to provide the combined utility of the invention which is strong evidence of the non-obvious nature of the invention.

In view of the above, Applicants submit that the invention as claimed is patentably distinct over the cited art. A reconsideration of the application and an expeditious indication of allowance of all pending claims are, accordingly, requested.

Respectfully submitted,



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